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Soil Conservation Service

STA/STA

Portland, Oregon



Water Supply Outlook for Oregon as of APRIL 1, 1982



TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: LONE CONE, NEAR NORWOOD COLORADO, BLANKETED BY ITS WINTER MANTLE OF SNOW.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE ADDRESS

Alaska Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504

Arizona Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025

Colorado (N. Mex.) P. O. Box 17107, Denver, Colorado 80217

ldaho Room 345, 304 N. 8th. St., Boise, Idaho 83702

Montana P. O. Box 98, Bozeman, Montana 59715

Nevada P. O. Box 4850, Reno, Nevada 89505

Oregon 1220 S. W. Third Ave., Portland, Oregon 97204

Utah 4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138

Washington 360 U. S. Court House, Spokane, Washington 99201

Wyoming P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W, Calgary, Alberta T3C 1A6.



☆ GPO 593-038

WATER SUPPLY OUTLOOK FOR OREGON

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

April 1, 1982

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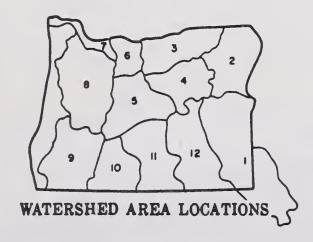
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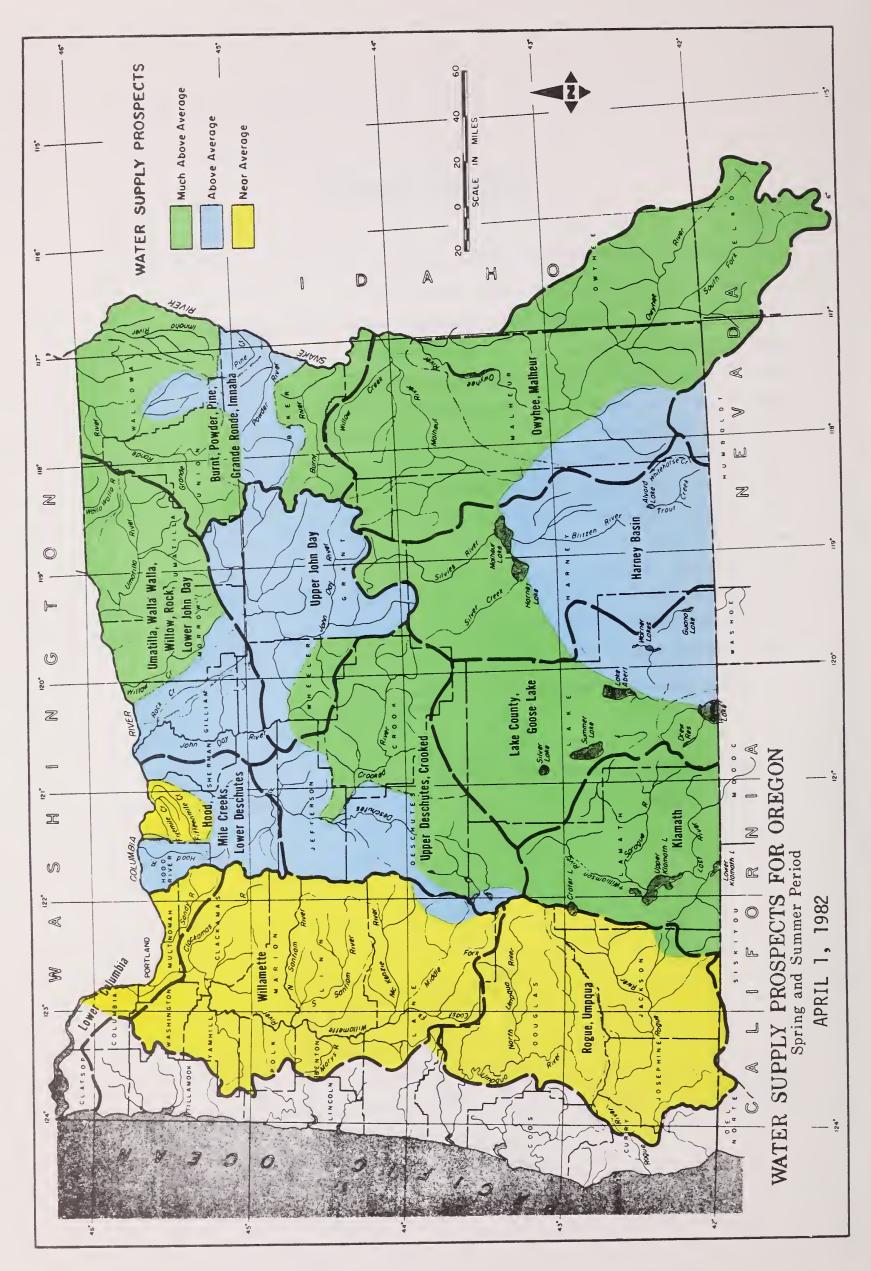
> SOIL CONSERVATION SERVICE 1220 S.W. THIRD AVENUE PORTLAND, OREGON 97204



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WATER SUPPLY OUTLOOK AND SUMMARY FOR ORFGON

APRIL 1, 1982

SNOW COVER

A near normal snowpack exists on the west side of the Cascade range except for the lower elevation watersheds such as the Coast Fork of the Willamette where it is below average. The snow cover in the Siskiyous is also below average having melted in February during the warm rains. East of the Cascades the snowpack is above average to much above average. Exceptions here are the Mile Creeks near The Dalles which are 60% of average and some areas in Lake County near the California line which are below average.

PRECIPITATION

Precipitation during March was slightly below average on the Rogue, Willamette, Deschutes and Hood River Basins. Near average precipitation was received on the John Day, Umatilla, Grande Ronde, Powder and Burnt River watersheds. Above average precipitation fell in southern Oregon east of the Cascades. Precipitation since November has ranged from 117% in the northeast corner of the state to 175% in south central Oregon. It has been an excellent winter for snowfall and rain.

RESERVOIR STORAGE

Twenty-seven major irrigation reservoirs in the state are currently at 84% of capacity. They are storing 2,660,700 acre feet of water which is 110% of normal. Some are full and spilling with most of the snowmelt runoff yet to come.

STREAMFLOW

Streamflow has been above average this past winter because of the abundant warm rains. Because of the excellent snowpack over most of the state and the saturated soils, streamflow is expected to be near average west of the Cascades and above to much above average in the eastern two-thirds of the state.

Prospective streamflow as a % of average on representatives Oregon streams is as follows:

STREAM	PERI OD	% OF AVERAGE
Owyhee net Inflow	April-Sept.	199
Grande Ronde @ LaGrande Umatilla @ Pendleton	April-Sept. April-Sept.	130 129
Deschutes @ Benham Falls	April-Sept.	112
Willamette, Mid.Fk. nr. Oakridge	April-Sept.	107
Rogue @ Raygold	April-Sept.	120
Upper Klamath Lake net Inflow	April-Sept.	139
Silvies nr. Burns	April-Sept.	170

These forecasts assume normal weather conditions will occur during the forecast period.

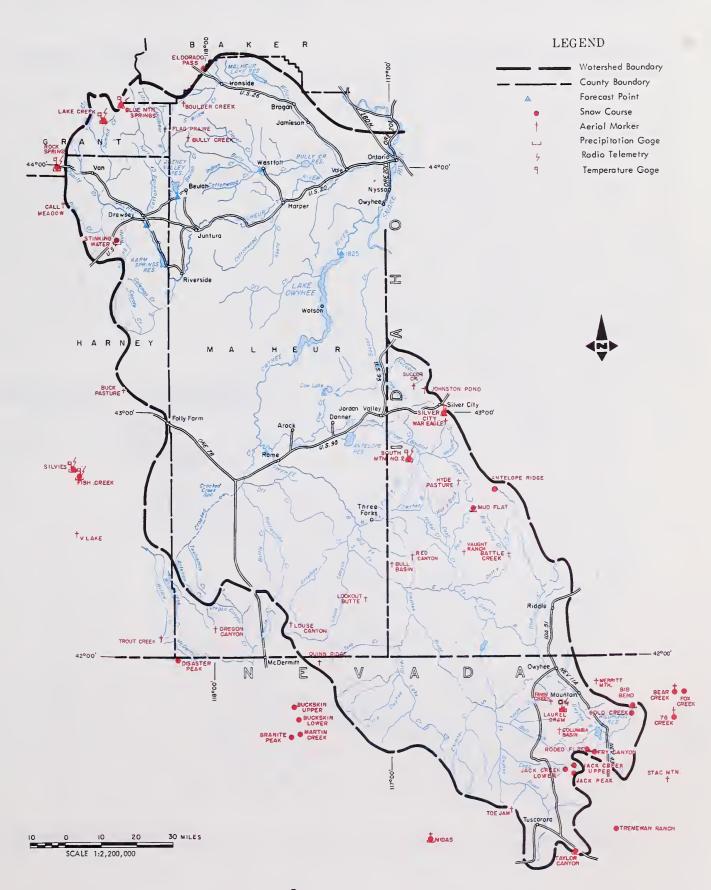
The forecasts in this bulletin are a result of coordinated activity between the Soil Conservation Service and the National Weather Service as an effort to provide the best possible service to water users.

This report contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators.

WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS OREGON

GENERAL OUTLOOK

The forecast is for excellent water supplies this summer. Malheur County will have 160 to 200% of normal streamflow. The area snowpack is the best in the state. It ranges from 141% of normal on Jordan Creek to 190% on the Owyhee River. Precipitation for March was 141% of normal and it is 162% for the season. All large irrigation reservoirs are near capacity with much snowmelt yet to come.



TREAMFLOW FORECASTS		THIS YEAR			PAST RECORD		
	FORE	FORECAST		THOUSAND ACRE FEET			
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	FORECAST PERIOD	Last Year	Average C		
Bully Creek at Warmsprings	35	278	March-May		12.6b		
Malheur near Drewsey	125 128	176 176	April-July April-Sept.		71 73		
lalheur, North Fork at Beulah	107	175 170	April-July April-Sept.		61 67		
wyhee Reservoir net Inflow	754 780	207 199	April-July April-Sept.		365 392		
wyhee at Rome	750	208	April-July		361 b		
Succor Creek near Jordan Valley	14.8	161	April-July		9.2b		

FORECAST DATE of LOW FLOW VALUES

RESERVOIR STOR	AGE	(Thousand	Ac.	Ft.)	END OF MONTH
----------------	-----	-----------	-----	------	--------------

				MESERTOIN STORAGE CO				1011111
FORECAST POINT	Low Flow Value	Julean min	Average Date of Low Flow	RESERVOIR	Usable	Usable Storage		
	Second/Ft.			RESERVOIR	Capacity	This Year	Last Year	Average C
Owyhee near Rome	2000 1000 500	June 15	May 14 May 28 June 11	Beulah Reservoir Bully Creek Owyhee Warmsprings	60.0 30.0 715.0 191.0	27.5 701.3	41.8 27.2 605.6 177.9	43.9 22.3 581.1 126.1

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

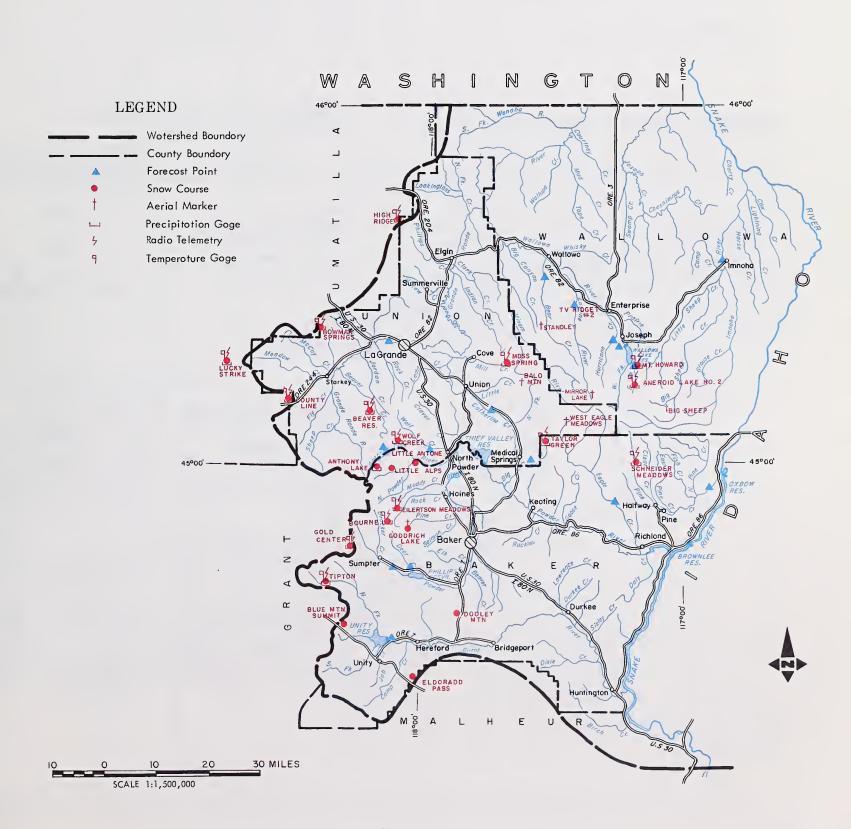
RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF		
SUB-WATERSHED	Averaged	Last Year	Average C	
Jordan Creek Malheur River Owyhee River	3 4 7	332 234 597	141 150 190	

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS OREGON

GENERAL OUTLOOK

Streamflow will be excellent this summer in Baker, Union and Wallowa Counties. The forecast ranges from 116% of normal on Anthony Creek to 160% on the Burnt River. The snowpack is above average for the entire area. Reservoir storage is near average for this time of year and there will be no problem in filling them. Precipitation for March was slightly below normal, but for the season it is 117% of normal.



Thousand Acre Feet 18.0 87 14.3 56 60 84 22 219 237 204	Percent of Average 116 133 142 160 167 133 147 129 128 130	April-July April-Sept. April-July April-July April-Sept. April-Sept. April-July April-July April-July April-July	THOUSAND A	15.5 65 10.1 35 36 64 15.0 b 169 184
*18.0 87 14.3 56 60 84 22 219 237 204	116 133 142 160 167 133 147 129 128	April-July April-Sept. April-July April-July April-Sept. April-Sept. April-July April-July April-July	Last Year	15.5 65 10.1 35 36 64 15.0 b
87 14.3 56 60 84 22 219 237 204	133 142 160 167 133 147 129	April-Sept. April-July April-Sept. April-Sept. April-July April-July April-July		65 10.1 35 36 64 15.0 b
87 14.3 56 60 84 22 219 237 204	133 142 160 167 133 147 129	April-Sept. April-July April-Sept. April-Sept. April-July April-July April-July		65 10.1 35 36 64 15.0 b
14.3 56 60 84 22 219 237 204	142 160 167 133 147 129 128	April-July April-July April-Sept. April-July April-July April-Jept.		10.1 35 36 64 15.0 b
56 60 84 22 219 237 204	160 167 133 147 129 128	April-July April-Sept. April-Sept. April-July April-July April-Sept.		35 36 64 15.0 ½
60 84 22 219 237 204	167 133 147 129 128	April-Sept. April-Sept. April-July April-July April-Sept.		36 64 15.0 ½ 169
84 22 219 237 204	133 147 129 128	April-Sept. April-July April-July April-Sept.		64 15.0 ½ 169
22 219 237 204	147 129 128	April-July April-July April-Sept.		15.0 ½ 169
219 237 204	129 128	April-July April-Sept.		169
237 204	128	April-Sept.		1
204				1 184
	1 20			1
		April-July		157
209	1 30	April-Sept.		161
55	120	April-Sept.		46
410	134	April-Sept.		305
145	118	April-Sept.		123
233	120	April-July		194
68	120	April-July		57
71	123			58
11.0	120			9.1
14.0				11.4
90				73
18.9	156			12.1
	145 233 68 71 11.0 14.0 90	145 118 233 120 68 120 71 123 11.0 120 14.0 121 90 122	410	410

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

WESERAOUR SIGNAGE	Housand	NU. 1 (.)	END OF	MONTH
DECEDIANT	Usable	U	sable Stora	ge
RESERVOIR	Capacity	This Year	Last Year	Average ^C
Phillips Lake Thief Valley Unity Wallowa Lake Wolf Creek	73.5 17.4 25.2 37.5 10.4	51.2 18.1 18.7 21.1 4.3	 17.7 25.1 28.8 8.8	52.3 17.4 19.6 23.5

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)					
	RIVER BASIN and/or	Number of Courses		AR'S SNOW PERCENT OF	
	SUB-WATERSHED	Averaged	Last Year	Average C	
	Burnt River Grande Ronde River above La Grande Powder River Wallowa, Imnaha,	4 3 4	218 318 331	115 131 126	
	Catherine Creek	5	213	126	

FORECAST DATE of LOW FLOW VALUES

TONEONS! DATE OF LOW	ILUW TAL	0_0	
FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Eagle Cr.abv.Skull Cr.	225	Aug. 11	July 25
	160	Aug. 24	Aug. 5
Catherine Cr.nr.Union	66 100 50	Aug. 1 July 22 Aug. 9	Avg.value 49 July 9 July 28
Powder near Sumpter	100	July 1	June 25
	20	July 26	July 22
Deer Cr. abv. Phillips	40	June 25	June 17
Res. nr. Sumpter	10	July 14	July 6

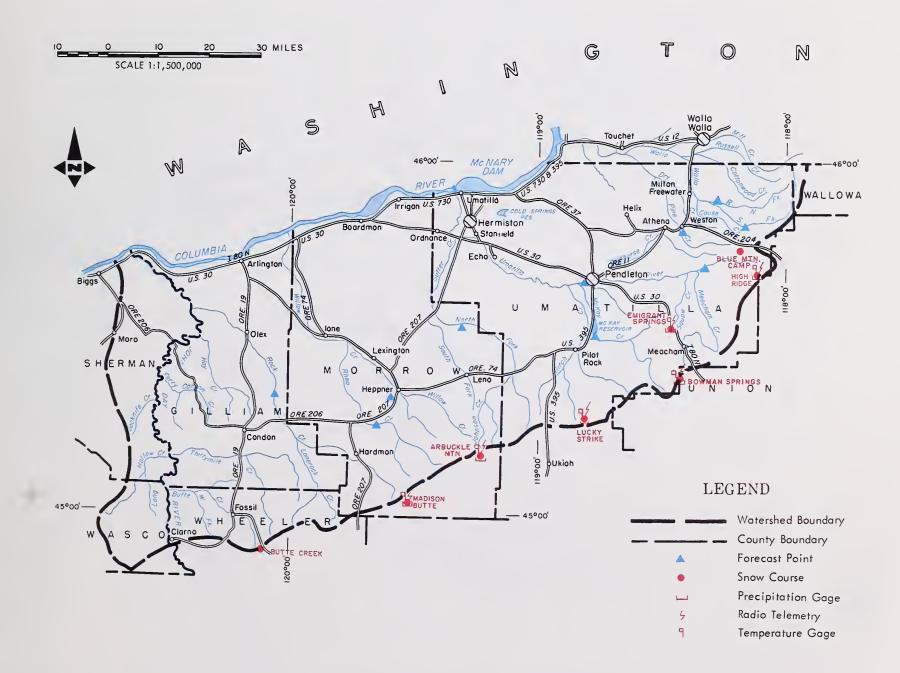
⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS OREGON

GENERAL OUTLOOK

The streamflow this summer will be much above average for Morrow and Umatilla Counties and above average for Gilliam County. It ranges from 119% of normal for Rock Creek to 136% for McKay Creek. The mountain snowpack is much above average. Precipitation for the area was 93% of normal for March and is 108% for the season. Reservoir storage is good with no filling problems expected.



STREAMFLOW FORECASTS		THIS YEAR			PAST RECORD	
	FORE	FORECAST		THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	FORECAST PERIOD	Last Year	Average (
Butter Creek nr. Pine City Couse Creek nr. Milton Freewater McKay near Pilot Rock Pine Creek near Weston Rhea Creek nr. Heppner Rock Creek abv. Cayuse Canyon nr. Condon	10.1 5.2 30 4.1 5.3 10.7	141 136 146 126 119	April-July April-July April-Sept. April-July April-July April-July		7.5 4.0b 22 2.8b 4.2 9.0b	
Umatilla near Gibbon Umatilla at Pendleton Walla Walla, South Fork near Milton Willow Creek at Heppner	95 100 188 194 65 80 6.9	128 130 129 117	April-July April-Sept. April-July April-Sept. April-July April-Sept. April-July		72 78 145 150 55 69 5.1	

FORECAST DATE of LOW FLOW VALUES

FUNEGAST DATE UT LUW	LLUM ANT	OE2	
FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	550	May 25	May 17
So. Fk. Walla Walla	200 110	June 21 AugSept Min.Flow	June 9 Avg.value 105

	KEZEKANIK ZINKARE (1	END OF M	НТИО		
)	RESERVOIR	Usable	L	sable Stora	ge
	RESERVOIR	Capacity	This Year	Last Year	Average C
	Cold Springs McKay	50.0 73.8	45.2 64.7	48.0 63.9	47.3 47.5

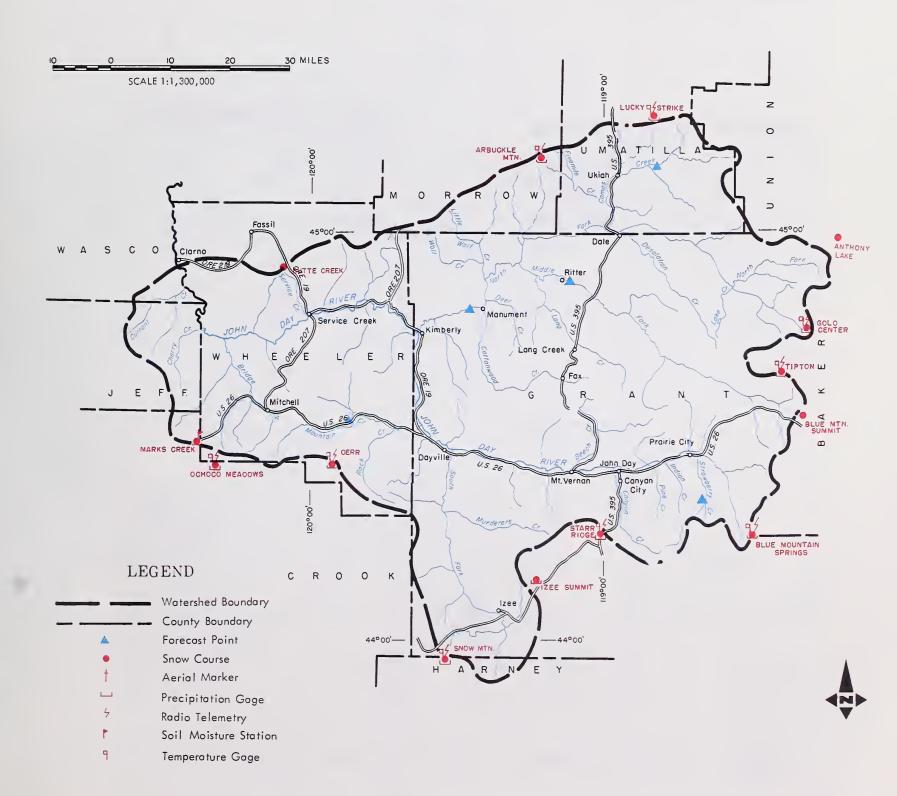
SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)								
RIVER BASIN and/or	Number of Courses		AR'S SNOW PERCENT OF					
SUB-WATERSHED	Averaged	Last Year	Average C					
McKay Creek Umatilla River Walla Walla River	3 3 2	321 300 332	138 138 133					

WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies will be excellent this summer with the streamflow forecasted to be above average. The snowpack is much above average in the John Day basin. It ranges between 135 to 151% of average. Precipitation has been good. It was 107% of normal for March and 141% for the November-March period.



TREAMFLOW FORECASTS		THIS YEAR			PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND A	ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average C		
Camas Creek near Ukiah John Day, Middle Fork at Ritter John Day, North Fork at Monument Mountain Creek nr. Mitchell Strawberry near Prairie City	41 42 135 139 659 677 4.9 9.3 10.2	126 126 124 123 125 125 157 129 130	April-July April-Sept. April-July April-Sept. April-July April-Sept. April-July April-July April-July April-Sept.		33 34 109 113 526 541 3.1b 7.1 7.7		

FORECAST DATE of LOW FLOW VALUES

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value		RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged		AR'S SNOW PERCENT OF
	Second/ Ft.	Flow Value	Value		SUB-WATERSHED	, trotaged	Last Year	Average C
John Day at Service	337	Aug. 1	Avg.value 212	John Da	ay, North Fork ay abv. Dayville	7 5	1272 246	1 35 151

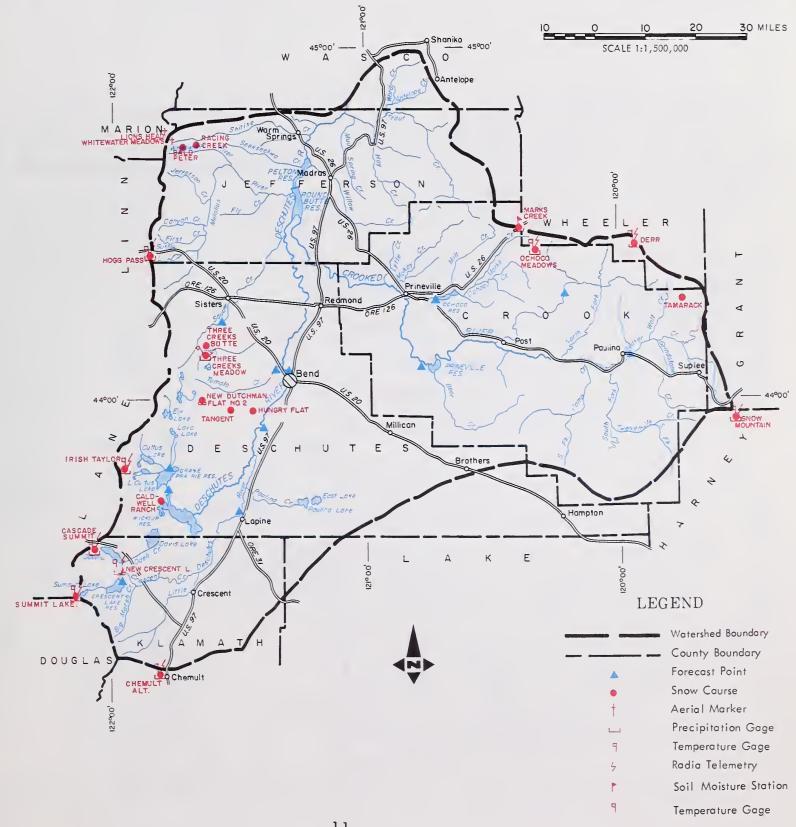
⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

UPPER DESCHUTES, CROOKED WATERSHEDS **OREGON**

GENERAL OUTLOOK

Streamflow this summer will be good to excellent in the Deschutes and Crooked Rivers. It ranges from 110% of average for Crescent Creek to 225% for the Ochoco Reservoir net inflow. March precipitation was only 87% of normal; however, for the November-March season it is 157% of normal. Snowpack in the Deschutes basin is good with 115 to 126% of average. In the Crooked and Ochoco basins the snowpack is excellent with 155% of average. Reservoir storage is good in the area except for Crescent Lake which is only 40% full. It is not expected to fill this year.



STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD		
	FORECAST		FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average C	
		<u> </u>				
Beaver Creek near Paulina	30	186 185	April-July April-Sept.		16.0 16.1	
Crane Prairie Reservoir total Inflow	106	138	April-July		77	
Crescent at Crescent Lake	167	139	April-Sept. April-July		120 17.8	
	24	110	April-Sept.		22.0	
Crooked River nr. Prineville	158 159	177	April-July April-Sept.		89 90	
Crooked R., No. Fk. blw. Lookout Cr. nr. Paulina	18.1	183	April-July		9.9 _b	
Deschutes below Bend Deschutes at Benham Falls	162 412	112	AugSept. April-July		 368	
	627	112	April-Sept.		713	
Deschutes below Snow Creek Deschutes, Little near La Pine	87	137	April-Sept. April-July		63 74	
beschutes, Little hear La Fine	128	152	April-Sury		84	
Ochoco Reservoir net Inflow	36 62	225 127	April-Sept. April-Sept.		16.0 49	
Squaw near Sisters Tumalo near Bend	54	127	April-Sept.		45	

FORECAST DATE of LOW FLOW VALUES

Forecast Date Stream Will Recede to Low Flow Value Low Flow Value Second/Ft. Average Date of Low Flow Value FORECAST POINT Crane Prairie net 507 Peak Oct. 31 May 29 Inflow 300 Peak Crooked R. near Post June 16 June 1 100 1500 July 19 July 1 Deschutes below Bend 400 June 20 June 7 Little Deschutes nr. 200 July 25 July 8 La Pine Squaw Cr. nr. Sisters 100 Sept. 20 Aug. 16 Tumalo Cr. nr. Bend 235 July 9 June 23 July 11 July 23 Sept. 11 207 June 25 July 5 Aug. 7 150

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

TESERTOIR STURME (THOUSAND NO. 11.) END OF MONTH									
RESERVOIR	Usable	U	sable Stora	ge					
RESERVOIR	Capacity	This Year	Last Year	Average C					
Crane Prairie Crescent Lake Ochoco Prineville Wickiup	55.3 86.9 47.5 153.0 200.0	39.3 35.5 34.1 127.0 185.4	32.4 27.2 44.4 156.0 179.4	47.2 65.1 33.8 103.8 190.4					

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

(COMPARISON WITH PREVIOUS TEARS)									
RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT O							
SUB-WATERSHED	Averaged	Last Year	Average C						
Crooked, Ochoco Deschutes abv. Wickiup Little Deschutes Tumalo & Squaw Crs.	4 3 4 3	304 275 408 366	155 119 115 126						

WATER SUPPLY OUTLOOK

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

OREGON

GENERAL OUTLOOK

Hood River and Wasco Counties will have good water supplies this summer. Streamflow forecasts are for above average flows. Precipitation for March was only 79% of average, but for the November-March season it is 128%. Snowpack is near average except for Mile Creeks which is much below average. Clear Lake Reservoir is slightly below normal for this time of year.



STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD		
	FORECAST		FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average ^C	
Hood River at Tucker Bridge nr. Hood River Hood River, West Fork near Dee White below Tygh Valley	278 332 140 164 137 155	115 110 110 120 120	April-July April-Sept. April-July April-Sept. April-July April-Sept.		242 289 127 149 114 129	

FORECAST DATE of LOW FLOW VALUES

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

FORECAST POINT	Low Flow Value	Forecast Date Stream Will	Average Date of Low Flow	RESERVOIR	Usable		Isable Stor	age
101120101110111	Second/Ft.	Recede to Low Flow Value	Value		Capacity	This Year	Last Year	Average C
Clear Branch Inflow	*42	July 15-31	**39	Clear Lake (Wasco)	11.9	4.6	2.9	5.1
*Average cfs forecast to flow for this two-week period.								
**Average cfs for period of record.	ŕ							
White blw. Tygh Valley	200	July 10	July 3					
	168	Aug. 1	Avg.value 145					
				SUMMARY of SNOW ME	A CHDEMI	ENTC	l	1 1
				(COMPARISON WITH PREVIOUS	YEARS)			
				RIVER BASIN and/or	Number Cours Averag	es W		RCENT OF
				SUB-WATERSHED	Averag	La	st Year	Average C
				Hood River Mile Creeks	5	7	71	100 57
				White River	3	6	553	103

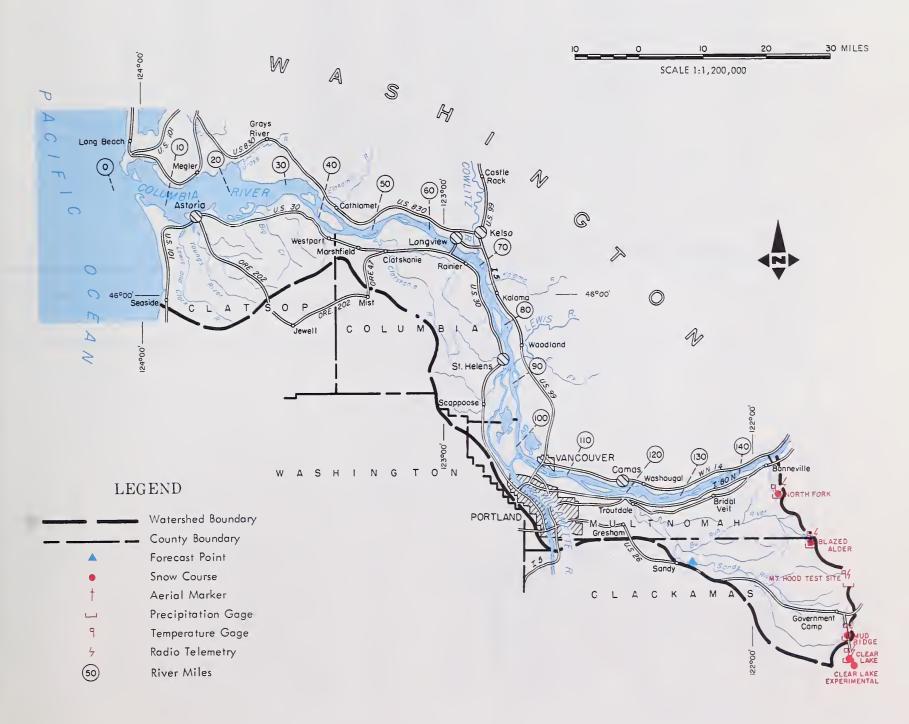
⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

USDA-SCS-PORTLAND, OR. 1981 M7-UL-

WATER SUPPLY OUTLOOK LOWER COLUMBIA WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies will be good this summer. The Columbia River at The Dalles is forecast to be 116% of average and the Sandy River will be 100%. Mountain snowpack is good, ranging from 106% on the Sandy to 113% on the Columbia.



SUMMARY OF SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or	Number of Courses WATER AS PERC		
SUB-WATERSHED	Averaged	Last Year	Average C
Sandy River	2	623	106

STREAMFLOW FORECASTS		THIS YEA	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET	
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average ^C
Columbia at The Dalles	102,000	115 116	April-July April-Sept.		88,520 103,500
Sandy River near Marmot	329 384	100	April-July April-Sept.		329 384

HISTORICAL DATA (Columbia River at The Dalles)

VEAR		STREAMFLOW d(1,000 A F.)	REGULATED PEAK	DATE
YEAR	APR - SEPT.	APR — JUNE	MAY — JUNE	(1,000 c.f s)	DATE
1963	87,860	58,499	47,812	437	June 18
1964	110,422	73,512	63,670	662	June 18
1965	114,222	80,098	62,467	520	June 9
1966	87,386	58,250	45,962	396	June 12
1967	109,319	74,378	66,452	622	June 10
1968	89,102	55,593	47,994	404	June 13
1969	112,377	85,742	63,899	515	May 15
1970	88,243	62,993	55,227	425	May 28
1971	126,898	91,781	76,453	557	May 13
1972	135,500	97,041	81,451	619	June 20
1973	65,549	43,765	36,565	221	December 5
1974	139,501	99,035	78,946	588	June 20
1975	108,906	73,018	62,861	422	May 17
1976	122,771	79,084	62,554	418	May 14
1977	54,108	35,505	28,394	213	January 25
1963-77 Avg.	103,478	71,220	58,714	468	

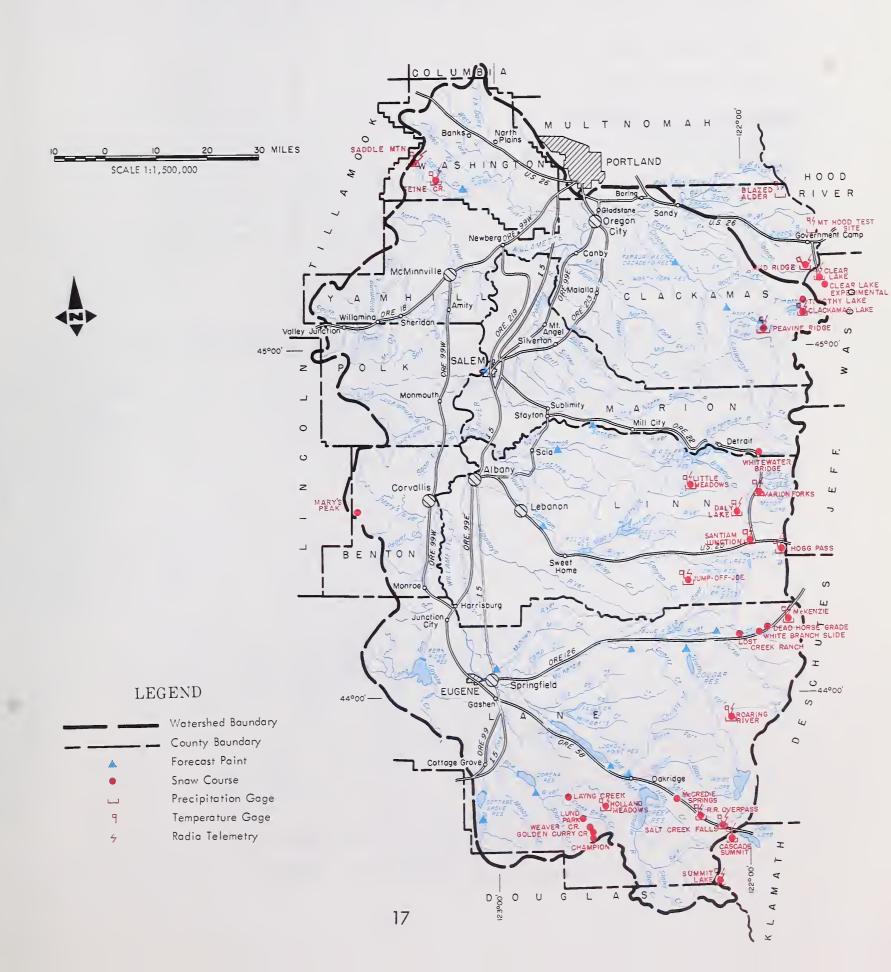
LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

	5			DRAINA	GE DISTRICT PUM	PHOUSE		
VANCOUVER GAGE	FLOW AT	SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
(Weather Bu.)	THE DALLES (1,000 c.f.s)				RIVER MILES			
(Wedther Bu.)	(1,000 c.f.s)	118.9	96.0	91.0	77.0	62.0	52.0	47. 0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32 (1972)	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

GENERAL OUTLOOK

Streamflow in the Willamette Valley is expected to be good with near normal flows this summer. The Clackamas River is forecasted to be 95% while the rest of the area will be from 100 to 120% of normal. Snowpack is good with 80% on the Row and 106% on the Santiam. March precipitation in the Valley was only 77% of normal, but for the November-March season it is 122%.



TREAMFLOW FORECASTS		THIS YEAR			PAST RECORD		
	FORECAST		FORECAST	THOUSAND ACRE FEET			
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average		
Clackamas at Estacada	640	95	April-July		674		
	749	95	April-Sept.		788		
Clackamas above Three Lynx	489	95	April-July		515		
McKenzie at McKenzie Bridge	580 474	95 105	April-Sept. April-July		610 452		
michenizie at michenizie britage	628	105	April-Sury April-Sept.		598		
McKenzie near Vida	1,155	113	April-July		1,024		
	1,403	111	April-Sept.		1,259		
McKenzie, So. Fork near Rainbow	221	107	April-July		207		
	251	107	April-Sept.		234		
Mohawk River near Springfield	74	120	April-July		62		
Oak Grove Fork above Power Intake	135	99	April-July		137		
	174	99	April-Sept.		175		
Row near Dorena	98	100	April-July		98		
C I N II I M.I	104	100	April-Sept.		104		
Santiam, North at Mehama	803	107	April-July		752		
Santiam, South at Waterloo	906 585	105 107	April-Sept.		860 547		
Santiall, South at water 100	631	107	April-July April-Sept.		590		
Scoggins Creek nr. Gaston	12.9	107	April-Sept. April-July		12.9		
Thomas Creek near Scio	76	107	April-July		71		
Willamette, Coast Fork nr. London	30	111	April-July		27		
Willamette, Mid Fk. blw. No.Fk. nr. Oakridge	726	108	April-July		678		
The state of the s	826	107	April-Sept.		776		
Willamette, No.Fk. of Mid.Fk. near Oakridge	208	111	April-July		188		
ů	234	112	April-Sept.		209		
1:11+++ C-1	4,508	107	April-July		4,213		
Willamette at Salem	5,026	107	April-Sept.		4,697		

SUMMARY of SNOW MEASUREMENTS

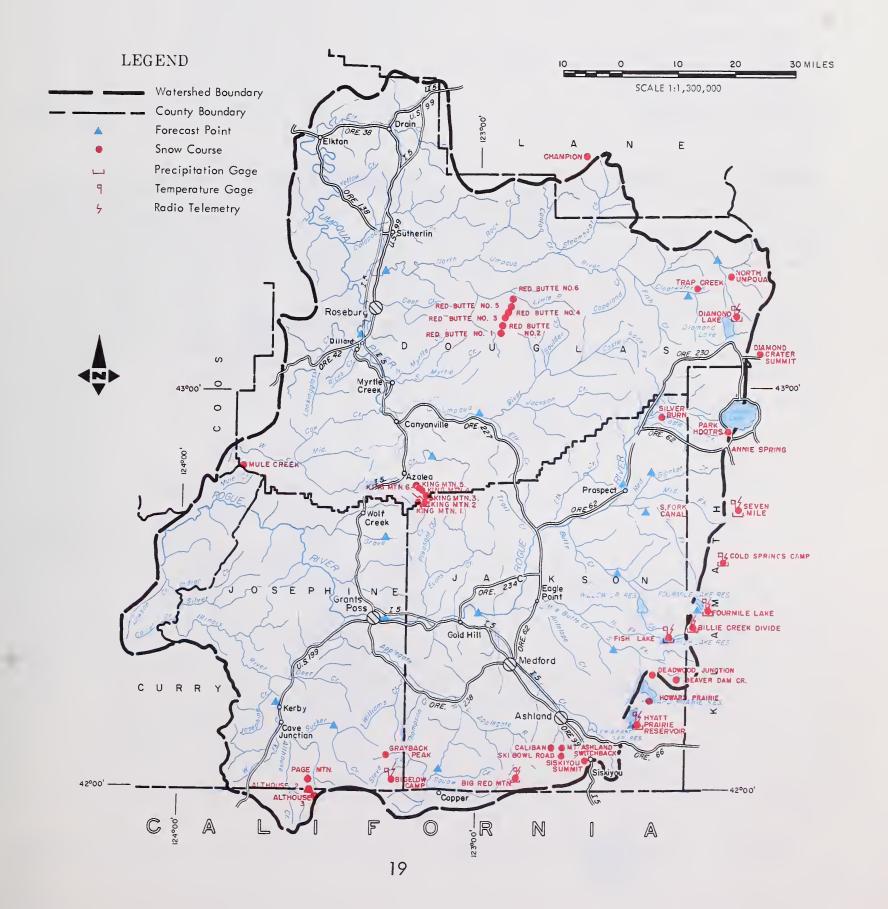
RIVER BASIN	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF		DESERVOIR	Usable	Usable Storage		
and/or SUB-WATERSHED	Averaged	Last Year	Average C	RESERVOIR	Capacity	This Year	Last Year	Average
Clackamas River McKenzie River Row River Santiam River Willamette, Mid. Fk.	2 3 2 4 5	546 795 885 349	95 100 80 106 105	Blue River Cottage Grove Cougar Detroit Dorena Fall Creek Fern Ridge Foster Green Peter Hills Creek Lookout Point Timothy Lake Henry Hagg Lake * Multiple purpose reservoirspace reserved primarily for flood runoff.	85.6* 30.0* 155.2* 299.9* 70.5* 115.0* 94.2* 30.0* 270.0* 337.2* 61.7 53.0	52.2 15.8 91.8 187.1 35.4 73.1 77.8 8.2 164.9 133.8 196.9 56.5 48.9	58.1 20.3 83.0 199.8 50.6 79.1 78.0 2.9 209.9 124.2 128.0 46.4 48.9	50.0 16.5 74.4 158.0 38.8 70.5 72.4 11.2 161.3 111.8 157.9

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

GENERAL OUTLOOK

Streamflow will be near average in the Umpqua River basin this summer and above average in the Rogue basin. The Applegate is forecast to flow at 92% of average. The snowpack ranges from 85 to 99% of average in the area except for 107% on the Rogue and 50% on the Illinois. March precipitation was 85% of normal and for the November-March period it was 128%. Reservoirs are nearly full except for Fish Lake and Fourmile Lake. Fourmile Lake will probably not fill this year.



STREAMFLOW FORECASTS		THIS YEAR			PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND A	CRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average C		
Applegate near Copper	119	92	April-Sept.		129		
Clearwater above Trap Creek	- 67	94	April-Sept.		71		
Cow Creek nr. Azalea	17.6	100	April-July		17.6		
Fourmile Lake net Inflow	6.0	154	April-Sept.		3.9		
Grave Creek at Pease Bridge nr. Placer	7.3	95	April-July		7.7		
Hyatt Reservoir net Inflow	5.0	103	April-July		4.9		
Illinois River near Kerby	170	97	April-July		176		
	178	98	April-Sept.		183		
Little Butte, N.Fk. at Fish Lake nr. Lake Cr.	19.9	142	April-Sept.		14.0		
Little Butte, S.Fk. near Lake Creek	41	131	April-July		31		
Red Blanket Creek nr. Prospect	40	115	April-July		35		
Rogue above Prospect	296	115	April-July	1	257		
	361	115	April-Sept.		314		
Rogue, South Fork near Prospect	70	113	April-July		62		
	83	113	April-Sept.		74		
Rogue at Raygold near Central Point	917	121	April-July		756		
	1,106	120	April-Sept.		919		
Rogue at Grants Pass	1,121	123	April-Sept.		913		
Sucker Cr. blw. Little Grayback nr. Holland	59	102	April-July	- Constitution of the Cons	58		
Umpqua, No.blw. Lemolo Lake, nr. Toketee Falls	191	112	April-Sept.		170		
Umpqua, No. at Winchester	806	105	April-July		768		
Umpqua, So. near Brockway	407	107	April-July		380		
Umpqua, So. at Tiller	183	100	April-July		183		
So.Fk. Big Butte Cr. nr. Butte Falls	45	122	April-July		37		

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Cow Creek nr. Azalea	20 10	July 1 Aug. 15	July 4 Aug. 19
Little Butte Creek, South Fork	100	June 12	May 15
South Umpqua nr. Brockway	90	Aug. 5	July 30
South Umpqua at Tiller	140 90 60	July 13 Aug. 5 Sept. 4	July 10 July 30 Aug. 27

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

MESERVUIR STURAGE (IIUuSaiiu	AL. IL.) END OF MONTH					
DECEDIAN	Usable	Usable Storage					
RESERVOIR	Capacity	This Year	Last Year	Average ^C			
Applegate Emigrant Lake Fish Lake Fourmile Lake Howard Prairie Hyatt Prairie Lost Creek	75.2 39.0 8.0 16.1 60.0 16.1 315.0	63.5 38.8 4.8 7.8 61.7 16.2 278.0	34.5 4.3 6.0 44.0 12.0 285.0	36.1 6.1 10.6 47.9 13.3			

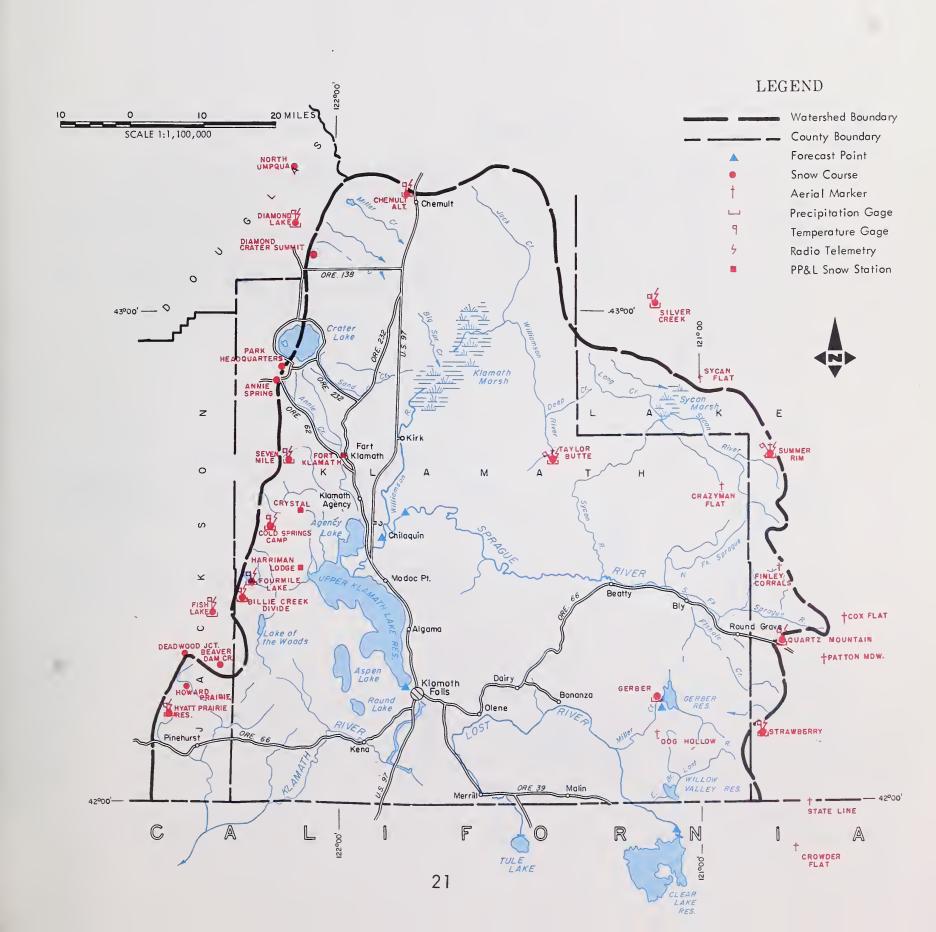
SUMMARY of SNOW MEASUREMENTS

RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOW WATER AS PERCENT OF		
SUB-WATERSHED	Averaged	Last Year	Average C	
Applegate Bear Creek Butte Creek Illinois River North Umpqua Rogue River Mt. Ashland	2 4 3 3 4 4	267 174 1176 487 3942 448 187	86 85 95 50 99 107 91	

WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

GENERAL OUTLOOK

Most water supplies will be excellent this summer. Streamflow will be much above average in Klamath County. Reservoir storage is near, to much above normal for this time of year. Snowpack in the region ranges from 112 to 120% of normal except for the Lost River watershed which is 92%. Precipitation was 108% of average for March and 171% for the November-March period.



STREAMFLOW FORECASTS		THIS YEAR	3	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET		
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average ^C	
Clear Lake Reservoir Inflow Gerber Reservoir Inflow Sprague near Chiloquin Upper Klamath Lake net Inflow Williamson below Sprague River	55 55 30 31 286 327 613 730 573	131 125 154 155 135 136 140 139 140	April-July April-Sept. April-July April-Sept. April-July April-Sept. April-July April-Sept. April-Sept.		42 44 19.5 20.0 212 242 438 526 409	

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable	U	Usable Storage			
RESERVOIR	Capacity	This Year	Last Year	Average ^C		
Clear Lake Gerber Upper Klamath Lake	440.2 94.0 584.0	287.7 96.0 451.0	179.3 44.7 484.7	277.7 66.4 467.7		

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or	Number of Courses	THIS YEAR'S SNOV WATER AS PERCENT (
SUB-WATERSHED	Averaged	Last Year	Average ^C	
Lost River Sprague River Upper Klamath Williamson River	4 3 6 3	178 259 584 2985	92 120 112 115	

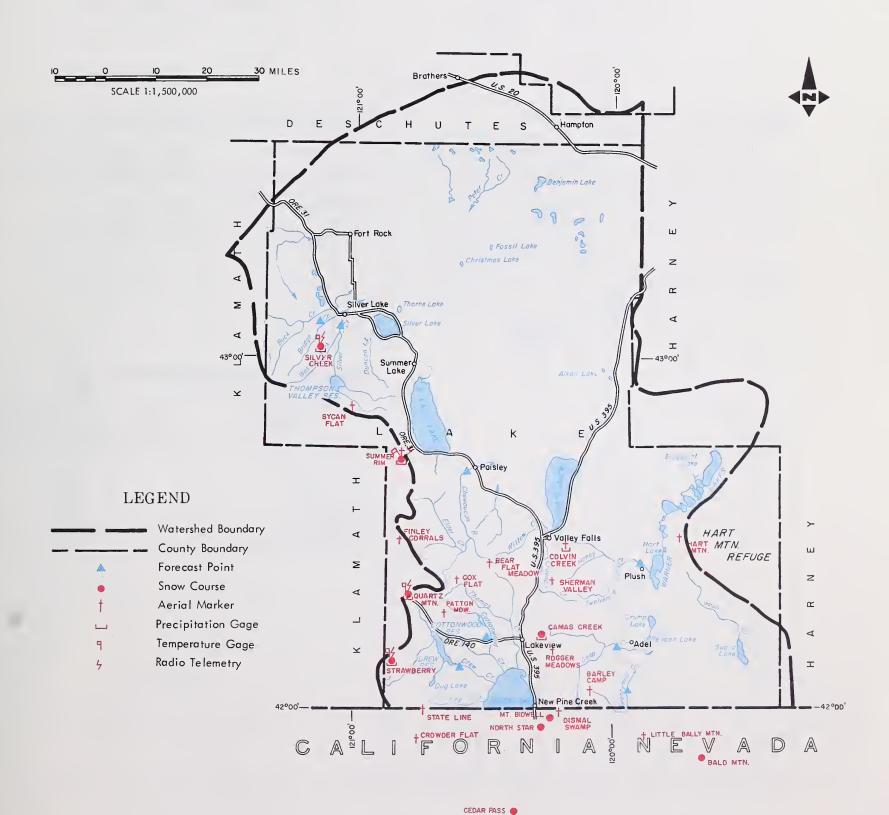
⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

WATER SUPPLY OUTLOOK

LAKE COUNTY, GOOSE LAKE WATERSHEDS OREGON

GENERAL OUTLOOK

Water supplies will be excellent this summer. Streamflows are forecast to be from 125 to 152% of normal. Reservoir storage is presently at capacity. Snowpack is near average except for Drew Creek (57%) and Twentymile Creek (71%). Precipitation was heavy during March (154% of average), with the November-March period now at 173% of average.



ADIN MTN.

TREAMFLOW FORECASTS		THIS YEAR	PAST RECORD		
	FORE	CAST	FORECAST	THOUSAND ACRE FEET	
BASIN, STREAM and/or FORECAST POINT	Thousand Acre Feet	Percent of Average	PERIOD	Last Year	Average C
Chewaucan near Paisley Cottonwood Creek nr. Lakeview Deep above Adel Drews Reservoir net Inflow Honey Creek near Plush Silver Creek near Silver Lake Twentymile near Adel Bridge Cr.nr. Spahr Ranch nr. Silver Lake	118 123 14.0 84 86 38 23 23 21 24 25 4.9	153 152 147 125 125 140 130 130 150 133 132 143	April-July April-Sept. April-July April-Sept. April-July April-July April-July April-July April-July April-July April-July		77 81 9.5 67 69 27 17.7 17.9 14.1 18.1 18.6 3.4

FORECAST DATE of LOW FLOW VALUES

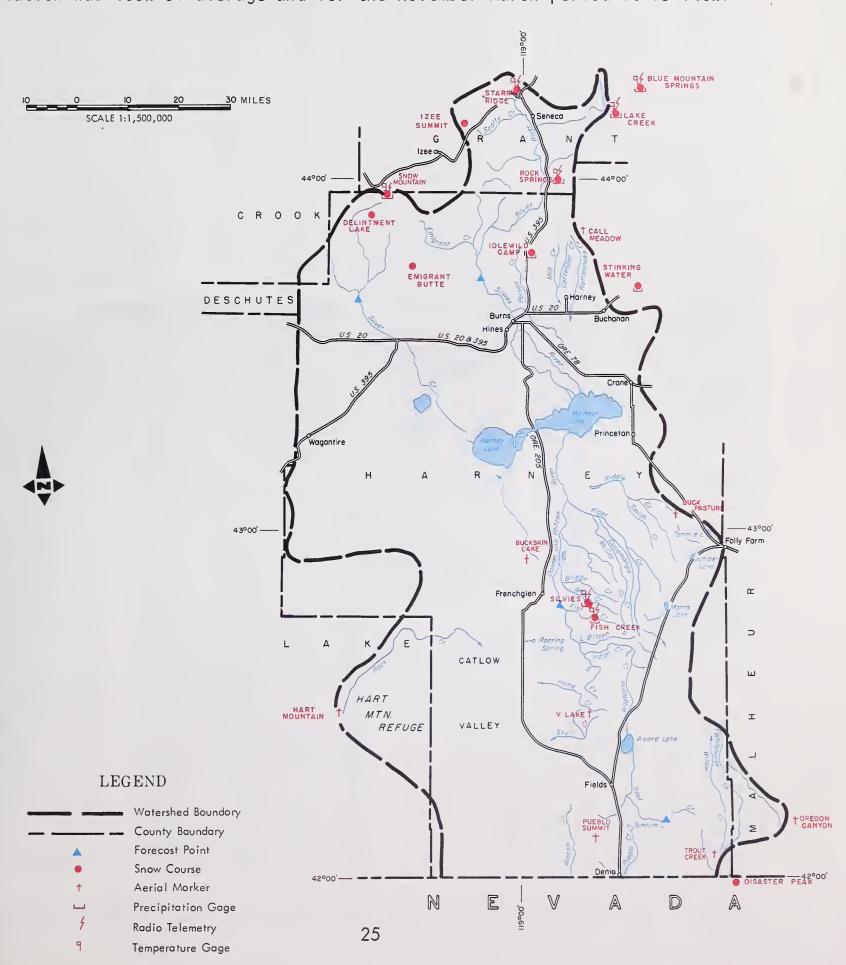
RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

	Low Flow	Forecast Date Stream Will	Average Date	RESERVOIR	Usable		Usable Stor	age
FORECAST POINT	Value Second/Ft.	Recede to Low Flow Value	of Low Flow Value	RESERVOIR	Capacity	This Year	Last Year	Average ^C
Deep Cr. above Adel Honey Cr. nr. Plush	100	June 29 June 13	June 21 May 15	Cottonwood Drews Thompson Valley	8.7 63.0 19.5	8.7 63.5 19.5	3.6 41.3 5.0	4.8 50.8 15.4
Twentymile near Adel	50 50 10	June 23 June 17 July 18	May 30 June 2 July 3					
				SUMMARY OF SNOW ME (COMPARISON WITH PREVIOU			THIS YEAR	R'S SNOW
				RIVER BASIN and/or SUB-WATERSHED	Cour	rses	WATER AS PI	Average C
				Chewaucan River Deep Creek Drew Creek Honey Creek Silver Creek Twentymile Creek		3 4 3 3 3 3 3	262 136 291 206 12300 214	120 94 57 103 127 71

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

GENERAL OUTLOOK

Water supplies will be excellent this summer in Harney County. Streamflow forecasts range from 120% of average on Trout Creek to 175% on Silver Creek. Snowpack is much above average on the Silvies and Steens. We were unable to get the snowpack information for the Trout Creek Mountains. March precipitation was 106% of average and for the November-March period it is 143%.



STREAMFLOW FORECASTS		THIS YEAR		PAST RECORD				
BASIN, STREAM and/or FORECAST POINT	FORE Thousand Acre Feet	Percent of Average	FORECAST PERIOD	THOUSAND A	ACRE FEET Average C			
Donner und Blitzen near Frenchglen Silver near Riley Silvies River near Burns Trout Creek near Denio	67 73 28 129 132 10.6	129 128 175 171 170 120	April-July April-Sept. April-July April-July April-Sept. April-Sept.		52 57 15.8 75 77 8.8			

FORECAST DATE of LOW FLOW VALUES

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS) Forecast Date Stream Will Recede to Low Flow Value THIS YEAR'S SNOW WATER AS PERCENT OF Low Flow Value Second/Ft. RIVER BASIN Number of FORECAST POINT and/or SUB-WATERSHED Courses Averaged Last Year Average C 119 May 28 Donner und Blitzen 129 Silvies nr. Burns 400 May 5 3 215 139 200 June 21 May 21 Silver Creek 171 July 8 June 9 Silvies River 4 269 100 Trout Creek 50 July 21 June 23 200 June 15 June 30 Donner und Blitzen 100 July 13 July 5 AVG. SURFACE SURFACE GAGE HEIGHT AC RES ACRES Malheur Lake at Break in Cole Island Dike near Voltage 40,000 77,300 July 1 95.68 Aug. 1 71,000 95.23 33,000

⁽a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

DAINAGE BASIN ond/or SNOW COUSE Survey Sur	SNOW	THIS YEAR		R		ECORD	SNOW		HIS YEA	R	PAST R	ECORD
UMMTILLA, MALLA MALLA, MILLON, 80CK, LONGE JOHN DAY WATERSHEDS AREA 3 39 12.8 1.8 10.3 Arbuckle Mountain Plw. (T) N/R Arbuckle Mountain Plw. (S) N/F S2 20.2 1.8 15.2 1.8 16.3 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1.8 10.3 1.8 1	DRAINAGE BASIN ond/or SNOW COURSE	of	Depth	Cont.	(Inch	nes)	DRAINAGE BASIN and/or SNOW COURSE	of	Depth	Cont.	(Inc	hes)
Gold Center Plw. (S) Gold Center Plw. (M) Gold Center Plw. (M) Izee Summit Lucky Strike Lucky Strike Plw. (T) Lucky Strike Plw. (S) A/5 Chacky Strike Plw. (S) A/5 Chacky Strike Plw. (S) A/5 Chacky Strike Plw. (S) A/6 Cohoco Meadows	UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS AREA 3 Arbuckle Mountain Plw. (T) Arbuckle Mountain Plw. (S) Arbuckle Mountain Plw. (M) Blue Mountain Camp Bowman Springs Plw. (S) Bowman Springs Plw. (S) Bowman Springs Plw. (M) Butte Creek Summit Emigrant Springs Plw. (S) Emigrant Springs Plw. (M) High Ridge Pillow (T) High Ridge Pillow (T) High Ridge Pillow (T) Lucky Strike Pillow (S) Lucky Strike Pillow (T) Madison Butte Pillow (S) Madison Butte Pillow (M) Modison Butte Pillow (M) Madison Butte Pillow (M) Madison Butte Pillow (M) Modison Butte Pillow (M) Modison Butte Pillow (M) Matter Mountain Springs Blue Mtn. Spgs. Plw. (T) Blue Mtn. Spgs. Plw. (T) Blue Mtn. Spgs. Plw. (M) Blue Mountain Summit Butte Creek Summit Butte Creek Summit Lucky Strike Plw. (M) Gold Center Plw. (S) Gold Center Plw. (S) Gold Center Plw. (S) Lucky Strike Plw. (M) Marks Creek Ochoco Meadows Plw. (S) Ochoco Meadows Plw. (S) Ochoco Meadows Plw. (S) Ochoco Meadows Plw. (S) Ochoco Meadows Plw. (M)	Date of Survey 4/5 N/R 4/1 4/1 4/5 N/R 4/1 3/30 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Snow Depth (In.) 39 86 52 37 17 23 101 52 44 16 91 39 86 68 70 37 35 52 44 7 33 39	12.8 28.4 20.2 13.0 6.1 8.1 45.3 42.9 43.2 15.9 13.9 4.8 33.8 12.8 28.4 23.2 26.0 28.4 13.8 12.8 24.1 20.5 23.7 14.2 13.7 11.4 15.9 13.9 17.0	1.8 12.6 10.6 1.8 2.9 2.4 0.5 0.3 0.8 14.7 17.2 15.1 7.0 2.6 1.4 1.6 1.2 17.1 1.8 12.6 10.6 11.8 10.5 11.0 5.7 2.7 1.1 1.8 7.0 2.6 1.4 4.8 4.8	27.9 10.3 32.3 32.3 12.7 1.8 8.9 12.6 12.6 1.8 8.2 1.8 8.2	UPPER DESCHUTES, CROOKED WATERSHEDS AREA 5 Bald Peter Beaver Creek Caldwell Ranch Cascade Summit Cascade Summit Plw.(T) Cascade Summit Plw.(S) Cascade Summit Plw. (M) Chemult Alternate Chemult Alt. Plw. (S) Chemult Alt. Plw. (S) Chemult Alt. Plw. (M) Derr Derr Pillow (T) Derr Pillow (S) Derr Pillow (S) Derr Pillow (M) Hogg Pass Hogg Pass Pillow (T) Hogg Pass Pillow (M) Hungry Flat Irish-Taylor Pillow (S) Irish-Taylor Pillow (S) Irish-Taylor Pillow (M) Lionshead * Marks Creek New Crescent Lake Plw.(T) New Crescent Lake Plw.(S) New Crescent Lake Plw.(S) New Crescent Lake Plw.(M) New Dutchman Flat #2 Ochoco Meadows Ochoco Meadows Plw. (T) Ochoco Meadows Plw. (S)	3/26 3/31 3/31 3/29 3/29 3/29 3/29 3/29 3/30 3/31 3/31 3/31 3/31 3/31 3/31 3/31	Snow Depth (In.) 103 28 36 86 101 36 29 36 108 114 0 124 139 33 39 48 52 51 127 8 68 27 51 70	Water Conf. (In.) 45.4 10.4 11.2 36.2 41.5 41.5 11.9 8.9 9.0 8.1 12.8 24.1 20.5 23.7 42.9 52.1 45.8 51.1 0.0 42.5 46.2 2.3 16.5 14.9 13.2 14.1 65.0 14.3 17.0 20.0 18.7 16.0 17.2 41.9 3.1 29.9 11.1 21.3 29.7 25.6	Water C (Inc Last Yr. Last Yr.	30.12

BASIC DATA SUPPLEMENT 1 APRIL 1, 1982

SNOW	T	HIS YEAR	2	PAST R	ECORD	SNOW	THIS YEAR			PAST RECORD		
DRAINAGE BASIN and/or SNOW COURSE	Date of	Snow Depth	Water Cant	(Incl		DRAINAGE BASIN and/ar SNOW COURSE	Date af	Snaw Depth	Water Cant.	(Inc		
OWYHEE MALHEUR WATERSHEDS	Survey	(In.)	(ln.)	Lost Yr.	Ave. C		Survey	(ln.)	(ln.)	Last Yr.	Ave. C	
AREA 1 Antelope Ridge (Ida.) Battle Creek (Ida.) * Bear Creek (Nev.) Big Bend (Nev.) Blue Mountain Springs Blue Mtn. Spgs. Plw. (T) Blue Mtn. Spgs. Plw. (M) Boulder Creek * Buck Pasture * Buck Pasture * Buckskin, Lower (Nev.) Bull Basin (Ida.) * Bully Creek * Call Meadows * Columbia Basin (Nev.) Disaster Peak (Nev.) Eldorado Pass Fawn Creek (Nev.) Fish Creek * Fish Creek Pillow (T) Fish Creek Pillow (S) Fish Creek Pillow (S) Fish Creek (Nev.) Gold Creek (Nev.) Government Corrals Granite Peak (Nev.) Jack Creek, Lower (Nev.) Jack Creek, Lower (Nev.) Jack Creek, Upper (Nev.) Jack Creek R.S. Plw. (T) Lake Creek R.S. Plw. (T) Lake Creek R.S. Plw. (S) Lake Creek R.S. Plw. (S) Lake Creek R.S. Plw. (S) Lake Creek R.S. Plw. (M) Laurel Draw (Nev.) Lookout Butte * Louse Canyon * Martin Creek (Nev.) Merritt Mountain (Nev.) * Midas (Nev.) * Mud Flat (Ida.) Oregon Canyon * Martin Creek (Nev.) Merritt Mountain (Nev.) * Red Canyon (Ida.) * Rock Spgs. Plw. (S) Rock Spg	3/29 3/29 N/R 3/29 3/29 N/R 4/5 4/2 4/2 N/R N/R N/R 3/31 3/31 3/31 3/31 3/31 3/31 3/31 3/	23 85 44 68 70 88 88 42 38 26 10 43 114 37 45 38 19 22 32 55 NTINUE 38 50 52 0	33.3_{α} 33.0_{α} 34.0 36.8 14.7 13.1 8.8 2.1 14.1 37.0 14.0 18.9 15.0 17.1 11.7 8.4 9.0 5.2 5.0 5.5 10.7 19.8	0.0 0.0 13.9 1.0 11.8 10.5 11.0 0.0 0.0 0.0 0.0 0.0 11.8 0.0 0.0 0.0 0.0 11.8 0.0 0.0 0.0 0.0 11.8 0.0 0.0 0.0 11.8 0.0 0.0 0.0 11.8 0.0 0.0 11.8 0.0 0.0 11.8 0.0 0.0 11.8 0.0 0.0 11.8 0.0 0.0 0.0 11.8 0.0 0.0 0.0 11.8 0.0 0.0 0.0 0.0 0.0 0.0 11.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	6.2 1.7 21.4 8.2 16.0 13.8b 12.2b 1.8 7.0 9.3b 0.4 0.8 2.7 6.8b 10.9 1.4 5.2b 26.1 29.8b 2.6 9.5b 6.1 4.9 15.4b 3.2 2.3 9.4 26.0 9.2 7.1b 13.8b 15.5 13.5b 15.5 13.5b 15.5 13.5b 15.5 13.5b 15.5 13.5b 15.5	BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS AREA 2 Aneroid Lake #2 Plw. (T) Aneroid Lake #2 Plw. (M) Anthony Lake Bald Mountain (OR) * Beaver Reservoir (Rev.) Beaver Res. Pillow (T) Beaver Res. Pillow (M) Big Sheep * Blue Mtn. Summit Bourne Bourne Pillow (T) Bourne Pillow (S) Bourne Pillow (M) County Line Pillow (T) County Line Pillow (S) County Line Pillow (S) County Line Pillow (M) County Line Pillow (S) County Line Pillow (M) Big Sheep * Blue Mtn. Summit Bourne Bourne Pillow (M) County Line Pillow (T) County Line Pillow (S) Bourne Pillow (M) County Line Pillow (S) County Line Pillow (S) County Line Pillow (S) County Line Pillow (M) Coodrich Lake Little Antone (Alt.) Lucky Strike Pillow (T) Lucky Strike Pillow (S) Moss Spring Pillow (M) Mirror Lake * Moss Spring Pillow (M) Mirror Lake * Moss Spring Pillow (M) Mt. Howard Pillow (S) Mt. Howard Pillow (S) Mt. Howard Pillow (S) Mt. Howard Pillow (S) Taylor Green Pillow (S) Schneider Meadow Plw. (T) Schneider Meadow Plw. (S) Schneider Meadow No (S) Taylor Green Pillow (M) Tipton Pillow (S) Tipton Pillow (M) TV Ridge * West Eagle Meadows * Wolf Creek Pillow (M) TV Ridge * West Eagle Meadows * Wolf Creek Pillow (M) Wolf Creek Pillow (M)	3/R 3/R 3/R 3/R 3/28 3/28 3/28 3/28 3/26 3/26 4/1 4/1 3/29 4/1 4/1 3/29 4/1 4/1 3/29 4/1 4/1 3/26 3/26 3/26 4/1 4/1 3/26 3/26 4/1 4/1 3/26 3/26 4/1 4/1 4/1 4/1 4/1 4/1 4/1 4/1 4/1 4/1	110 112 91 96 45 37 115 41 51 61 21 12 39 45 41 7 88 54 27 52 44 23 85 88 54 27 52 40 101 90 105 61 82 91 91 91 91 91 91 91 91 91 91 91 91 91	38.8 36.2 33.8 37.4 13.0 13.8 11.5 43.7 13.8 17.6 20.8 19.2 6.8 4.4 12.2 17.0 0.1 14.2 17.8 12.2 17.0 0.1 14.2 13.7 11.4 12.6 29.3 17.2 10.1 15.9 13.9 88.9 33.2 35.0 30.5 34.9 25.0 40.4 40.0 41.0 22.8 33.2 23.0 31.2	24.4 23.2 17.1 16.8 6.4 1.8 18.3 5.7 5.2 7.8 1.0 0.8 0.5 4.9 0.6 0.2 0.3 0.0 5.7 1.4 1.7 1.5 12.4 5.1 4.1 7.0 2.6 1.4 11.1 1.8 2.8 2.3 2.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1	34.0 27.9 24.0 12.7 25.2 8.0 14.5 3.4 7.9 11.6 1.4 12.6 36.8 14.8 12.7 74.6 24.8 12.7 33.5 16.8 14.3b 23.3b 23.3b 14.3b	

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DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cant. (In.)	Water (Inch	es)	DRAINAGE BASIN and/ar SNOW COURSE	Date af Survey	Snaw Depth (In.)	Water Cant. (In.)	Water C (Inc) Last Yr.	nes)
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS AREA 6 Brooks Meadow Clear Lake Clear Lake Pillow (T) Clear Lake Pillow (S) Clear Lake Pillow (M) Clear Lake Pillow (M) Clear Lake Expt. Greenpoint Greenpoint Pillow (S) Greenpoint Pillow (S) Greenpoint Pillow (M) Mt. Hood Test Site (T) Mt. Hood Test Site (S) Mt. Hood Test Site (M) Mud Ridge Pillow (T) Mud Ridge Pillow (S) Mud Ridge Pillow (M) Red Hill Red Hill Pillow (T) Red Hill Pillow (M) Still Creek Switchback Tilly Jane LOWER COLUMBIA WATERSHEDS AREA 7 Blazed Alder Pillow (S) Blazed Alder Pillow (S) Mt. Hood Test Site (M) Mut. Hood Test Site (M) Mut Ridge Pillow (S) Mt. Hood Test Site (M) Mud Ridge Pillow (T) Mud Ridge Pillow (T) Mud Ridge Pillow (S) Mud Ridge Pillow (M) North Fork Res. (S) North Fork Res. (S) North Fork Res. (S) North Fork Res. (M) Still Creek WILLAMETTE WATERSHEDS AREA 8 Cascade Summit Cascade Summit Plw. (T) Cascade Summit Plw. (M) Champion Clackamas Lake Clackamas Lake Clackamas Lake Plw. (M) Clear Lake Clear Lake Plw. (S) Clackama Lake Plw. (S) Clackama Lake Plw. (M) Clear Lake Expt.	N/R 3/27 3/27 N/R 3/30 3/30 3/29 3/29 N/R 3/31 N/R 3/29 3/30 3/30 3/30	20 21 	4.2 44.4 36.1 36.3 75.2 30.8 15.9 16.4 15.6 36.2 41.5 27.8 8.0 10.8 11.9 10.8 11.9 11.9 11.9 11.9 11.9 11.9 11.9 11	0.0 0.4 0.2 0.6 0.0 0.0 0.0 19.6 17.0 1.3 1.1 4.6 4.3 4.1 3.9 0.0 10.4 17.0 1.3 1.1 1.5 1.5 1.5 1.5 1.5 1.5 1.6 1.7 1.6 1.7 1.7 1.7 1.7 1.7 1.7 1.7 1.7	10.7 10.2 16.3 16.5 67.25 71.05 29.2 43.3 16.4 41.7	WILLAMETTE WATERSHEDS(CONT. Daly Lake Plw. (T) Daly Lake Plw. (M) Dead Horse Grade Golden Curry Creek Hogg Pass Hogg Pass Pillow (T) Hogg Pass Pillow (S) Hogg Pass Pillow (M) Holland Meadows Plw. (T) Holland Meadows Plw. (S) Holland Meadows Plw. (M) Jump Off Joe Pillow (T) Jump Off Joe Pillow (M) Layng Creek Little Meadows Plw. (S) Little Meadows Plw. (S) Little Meadows Plw. (S) Little Meadows Plw. (M) Lost Creek Ranch Lund Park Marion Forks Marion Forks Pillow (T) Marion Forks Pillow (S) Marion Forks Pillow (M) Marys Peak McCredie Springs McKenzie McKenzie Pillow (S) McKenzie Pillow (M) Mt. Hood Test Site (T) Mt. Hood Test Site (M) Peavine Ridge Pillow (T) Peavine Ridge Pillow (T) Peavine Ridge Pillow (T) Peavine Ridge Pillow (T) Roaring River Plw. (T) Roaring River Plw. (S) Railroad Overpass Plw. (T) Railroad Overpass Plw. (T) Railroad Overpass Plw. (S) Railroad Overpass Plw. (T) Roaring River Plw. (S) Railroad Overpass Plw. (S) Railroad Overpass Plw. (T) Salt Creek Falls Plw. (S) Santiam Junction Plw. (S) Santiam Junction Plw. (S) Santiam Junction Plw. (T) Salt Creek Falls Plw. (T) Santiam Junction Plw. (S) Santiam Junction Plw. (S) Santiam Junction Plw. (T) Still Creek Summit Lake Pillow (T) Still Creek Summit Lake Pillow (T) Still Creek White Branch Slide Whitewater Bridge	N/R N/R N/R 3/29 3/31 3/30 3/30 3/30 3/30 4/1 N/R N/R N/R N/R N/R N/R 3/29 DISCO 3/30 N/R 3/30 N/R 3/30 N/R 3/29 3/29 3/29 3/29 3/29 3/29 3/29 3/29	39 11 108 114 NTINUE 0 NTINUE 35 35 34 TR 114 117 172 TR 0 39 62 72 64 72 64 72 64 72 8 7 3 21	14.5 1.6 42.9 52.1 45.8 51.1 29.6 12.9 0.0 12.8 13.0 8.3 0.1 53.0 53.5 49.7 750.7 80.7 780	2.4 2.2 1.8 0.1 91.5 11.9 11.7 -5.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 13.4 13.8 19.6 16.4 17.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	18.8 4.2 42.3 42.3 13.0

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DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth	Water Cont.	(Incl		DRAINAGE BASIN ond/ar SNOW COURSE	Date of	Snaw Depth	Water Cont.	Woter (Inc	hes)
LAKE COUNTY, GOOSE LAKE WATERSHEDS AREA 11 Adin Mountain (Calif.) Bald Mountain (Nev.) Barley Camp * Bear Flat Meadow * Camas Creek #2 Cedar Pass (Calif.) Colvin Creek * Cox Flat * Crowder Flat (Calif.) * Dismal Swamp (Calif.) * Dismal Swamp #2 Plw. (T) Dismal Swamp #2 Plw. (M) Finley Corrals * Hart Mountain * Little Bally Mtn. (Nev.) Mt. Bidwell (Calif.) North Star (Calif.) Patton Meadows * Quartz Mountain Plw. (T) Quartz Mountain Plw. (M) Reservation Creek (Calif.) Rogger Meadows * Sherman Valley * Silver Creek Plw. (T) Silver Creek Plw. (T) Silver Creek Plw. (M) State Line (Calif.) * Strawberry Strawberry Plw. (T) Strawberry Plw. (T) Strawberry Plw. (T) Strawberry Plw. (S) Summer Rim Plw. (M) Sycan Flat *	of Survey N/R 3/26 3/26 3/26 3/26 3/26 3/26 3/24 N/R 3/26 3/24 3/26 4/1 N/R 3/30 3/30 3/23 3/26 3/27 4/1 4/1 3/26 3/29 3/29 3/29 3/29 3/29 3/26 3/27 4/1 4/1 3/26 3/26 3/27 4/1 4/1 3/26 3/26 3/27 4/1 4/1 3/26 3/26 3/26 3/27 4/1 4/1 3/26 3/26 3/26 3/26 3/26 3/26 3/26 3/26	0 41 22 17 26 44 12 0 0 76 42 28 46 20 23 24 26 36 0 39 6 15 13 50 76 92	Cont. (in.) 0.0 16.0 8.4 6.7 9.0 16.2 4.7 0.0 0.4 26.6 11.3 17.5 2.8 5.6 8.5 10.1 10.1 14.0 0.0 15.5 15.7 16.1 2.3 5.2 4.8 3.9 4.5 19.0 23.0 23.5 6.8	3.2 0.0 5.5 2.0 3.5 9.8 2.3 0.0 0.3 24.5 21.9 6.1 0.0 0.1 19.8 13.0 10.1 0.0 1.3 7.5 4.8 8.0 0.0 1.6 6.0 0.3 3.1 1.1 11.1 11.2 10.8 13.9	12.2 2.4 9.9 8.5 16.3 4.4b 6.4 1.9 26.0b 16.1b 17.8 4.5 10.5 11.8 1.1 6.9 6.4 17.2b 17.5b 5.3b	HARNEY BASIN WATERSHEDS AREA 12 Blue Mountain Springs Blue Mtn. Spgs. Plw.(T) Blue Mtn. Spgs. Plw.(S) Blue Mtn. Spgs. Plw.(M) Buck Pasture * Buckskin Lake * Call Meadows * Delintment Lake Denio Creek * Disaster Peak (Nev.) Emigrant Butte Fish Creek Rev.) Fish Creek Plw.(T) Fish Creek Plw.(T) Fish Creek Plw.(T) Fish Creek Plw.(M) Government Corrals Hart Mountain * Idlewild Camp Alt Izee Summit Lake Creek R.S. Plw.(S) Lake Creek R.S. Plw.(S) Lake Creek R.S. Plw. (M) Oregon Canyon * Pueblo Summit * Rock Springs Plw.(S) Rock Springs Plw.(S) Rock Springs Plw.(M) Silvies * Silvies Pillow (T) Silvies Pillow (S) Starr Ridge Pillow (S) Starr Ridge Pillow (S) Starr Ridge Pillow (M)	of Survey 3/31 N/R 3/31 3/31 N/R N/R N/R 3/31 DISCO N/R 4/1 DISCO 3/29 3/29 N/R 3/29 3/29 N/R 3/29 3/29 N/R 3/30 3/31 3/31 3/31 3/31 3/31 3/31 3/31		Cont. ((In.)) 23.2 26.0 28.4 7.8 0.4 33.3a 33.0a 34.0 36.8 0.0 0.4 12.4 14.0 18.9 15.0 17.1	11.8	

BASIC DATA SUPPLEMENT 2 APRIL 1, 1982

RECIPITATION (Inches)		CURRENT IN	ORMATION	PAST R	T RECORD		
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Precip- itation	Last Year	Average		
Aneroid Lake #2 (Wallowa County)	7300	From 2/23 To 3/30	6.96"				
Arbuckle Mountain (Morrow County)	5400	From 2/23 To 4/5	6.50"				
Beaver Reservoir (Union County)	5150	From 12/30 To 3/28	15.48"				
Bigelow Camp (Josephine County)	5120	From 2/24 To 3/24	5.16"		المجه		
Big Red Mountain (Jackson County)	6250	From 2/23 To 3/25	6.84"				
Billie Creek Divide (Jackson County)	5310	From 2/25 To 3/30	6.12"				
Blazed Alder (Clackamas County)	3650	From 2/24 To 3/30	22.32"				
Bourne (Baker County)	5800	From 2/22 To 4/1	3.36"				
Cascade Summit (Lane County)	4880	From 2/25 To 3/29	5.88"				
Chemult (Klamath County)	4760	From 3/1 To 4/1	2.76"				
Cold Springs (Klamath County)	6100	From 9/29 To 3/29	30.24"				
County Line (Umatilla County)	4800	From 2/23 To 4/5	4.32"				
Derr (Wheeler County)	5670	From 2/23 To 3/31	3.96"				
Eilertson Meadows (Baker County)	5400	From 2/22 To 4/1	3.12"				
Emigrant Springs (Umatilla County)	3925	From 2/23 To 4/5	5.16"				
Fish Lake (Jackson County)	4665	From 2/25 To 3/30	6.12"				
Gold Center (Grant County)	5340	From 2/22 To 4/1	2.52"				
High Ridge (Umatilla County)	4150	From 3/1 To 4/1	6.60"				
Hogg Pass (Jefferson County)	4755	From 2/23 To 3/30	7.92"				
Hyatt Prairie (Jackson County)	4900	From 3/1 To 3/31	3.96"				
Irish-Taylor (Deschutes County)	5500	From 2/25 To 3/31	7.20"				
King Mountain #2 (Douglas County)	4500	From 2/24 To 3/29	7.32"				

RECIPITATION (Inches)		CURRENT INF	ORMATION	PAST R	ECORD
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Precip- itation	Last Year	Average
Lake Creek (Grant County)	5120	From 2/23 To 3/31	3.00"		
Lucky Strike (Umatilla County)	5050	From 2/23 To 4/5	5.63"		
Madison Butte (Morrow County)	5250	From 2/23 To 4/5	3.84"		
Marks Creek (Crook County)	4540	From 2/24 To 4/1	2.80"		
McKenzie (Lane County)	5000	From 2/26 To 4/1	10.44"		
Moss Springs (Union County)	5850	From 2/25 To 3/26	5.52"		
Mt. Howard (Wallowa County)	7910	From 2/25 To 3/26	4.80"		
Mud Ridge (Clackamas County)	4050	From 2/24 To 3/31	5.16"		
North Fork Reservoir (Multnomah County)	3120	From 2/24 To 3/30	13.68"		
Ochoco Meadows (Crook County)	5200	From 3/1 To 3/30	2.64"		
Peavine Ridge (Clackamas County)	3500	From 2/24 To 3/30	5.28"		
Quartz Mountain (Lake County)	6300	From 2/25 To 3/30	3.30"		
Railroad Overpass (Lane County)	2750	From 2/25 To 3/29	4.80"		
Red Hill (Hood River County)	4400	From 2/26 To 3/29	8.88"		
Rock Springs (Grant County)	5100	From 2/22 To 3/30	2.16"		
Salt Creek Falls (Lane County)	4000	From 2/25 To 3/29	6.84"		
Silver Creek (Lake County)	5720	From 2/26 To 4/1	4.68"		
Snow Mountain (Harney County)	6220	From 3/1 To 3/31	3.88"		
Starr Ridge (Grant County)	5156	From 2/22 To 3/31	3.36"		
Summer Rim (Lake County)	7100	From 3/1 To 4/7	5.88"		
Summit Lake (Klamath County)	5600	From 2/24 To 3/30	7.44"		
Taylor Green (Baker County)	5740	From 2/25 To 3/26	3.24"		

RECIPITATION (Inches)		CURRENT INFORMATION PAST RECOI						
DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	Date of Reading	Precip- itation	Last Year	Average			
Three Creek Meadows (Deschutes County)	5650	From 2/23	3.48"					
Tinton (Pakon County)	5100	To 3/29	2.64"					
Tipton (Baker County)	5100	From 2/22 To 4/1	2.04					
chneider Meadows (Baker County)	5400	From 2/25 To 4/8	5.64"					
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	1666 1669a 55HA 1514P 1742 1741 1646a 1841 1646a 1841 1646a 1842 1547 1547 1548 1644 1665a 1644 1646	OWYHEE, MALHEU Owyhoo Antelope Ridge Battle Creek Bear Creek Big Bend Boulder Creek Big Bend Boulder Creek Buckskin, Lower Buckskin, Lower Buckskin, Lower Buckskin, Lower Buckskin, Loper Buckskin, Lower Buckskin, Loper Buckskin, Loper Buck Skin, Loper Buck Skin, Loper Fawn Creek Fish Creek Fox Creek Fry Canyon Gold Creek Fry Canyon Gold Creek Fry Canyon Gold Creek Fry Canyon Gold Creek, Upper Jack Creek, Upper Jack Creek, Upper Jack Peak Johnson Pond Laurel Oraw Lostout Butte Louse Canyon Hartin Creek Herritt Mountain	(Ida) (Ida) (Ida) (Ilev) (Ilev) (Ilev) (Ida) (Ilev) (Ida) (Ilev)	20 85 10 115 31 46H 30 45H 25 45H 11 45H 29 125 31 44H 2 4 335 33 45H 31 45H 31 45H 31 45H 31 45H 31 45H 31 45H 32 44H 31 85 48 42H 9 42H 5 45 22 405 27 405	1E 5900 1E 5700 58E 7800 56E 6700 13S 5690 39E 6700 39E 7200 53E 6650 34E 6500 52E 7000 33E 7900 54E 6700 56E 6600 2H 5600 578 5600 578 5600 578 5600 578 5600 579 579 579 579 579 579 579 579 579 579	16H3AP 16G7P 17G5a 17H6a 16G11a 15H6P 1SH3A 16F3AP* 16G1P 15H19a 16F06a 15H19P 16H7a 16H2a 16G12a 16G13a	Stag Mount Stag Mount Toylor Car Toe Jam Iremewan R Trout Cree "Y" Lake Vaught Rar War Eagle	ge (Ne) t (Ne) ty (Ne) ty (Ne) ty (Ne) tain No. 2(1d, 1d, 1d, 1d, 1d, 1d, 1d, 1d, 1d, 1d,	v) 18 39/ a) 34 9/ v) 9 47/ a) 32 11/ v) 36 43/ v) 6 44/ a) 6 5/ a) 10 8/ v) 32 41/ a) 36 33/ v) 32 41/ a) 36 33/ v) 35 32/ v) 35 39/ v) 29 40/ v) 9 39/ v) 9 39/ v) 20 55/ or 21 153/ 28 295/ 11 175/	4 46E 72: 5 2W 55: 5 40E 69: 4 41E 63: 6 4W 66: 7 53E 68: 7 53E 68: 7 58E 78: 6 3W 63: 7 58E 78: 7 50E 77: 7 50E 77: 7 50E 77: 8 50E 78: 8 50E 78: 9 53E 62: 1 53E 62: 1 53E 62: 1 53E 62: 1 53E 62: 1 53E 62:	000 550 600	18520 18528 • 1851 • 18613 • 18613 • 17510 18620 • 1863 • 1863 • 1863 • 1863 • 1863 • 1863 • 1864	81 ue Mountal Ocoley Mount Eldorado Pas Gold Center Tipton	DER, PINE, G NAMA WATER! Int River In Summit iain iss vde: River	32 165 10 165 23 185 34 215 RANDE HEDS 121 6 125 32 115 20 145 21 95 34 105	38E 4600 36E 4750 33½E 5200 32E \$100 34E 4800 36E 5098 400 5430 38E 4500 36E 5340 37E 7125 37E 5800 40C 5430 38E 5400 38E 5400 38E 5400 38E 5400 38E 5400 38E 5400 38E 5400 38E 6775	18E23 18E30 1707P ° 17017 18021 ° 1708 ° 1708 ° 17010a 1809 ° 1808P ° 17013a 1706 ° 17011a 1707P ° 17016a	Aneroid Lake Anthony Lake Bald Mountait Beaver Reserv County Line Lucky Strike Mirror Lake Moss Spring Mt. Noward Standley Taylor Green TV Ridge No.	adows ine Creek idows Ronde Riv No. 2 14 ofr	16 45 18 75 8 15 45 8 55 28 35 34 45 28 35 27 35 27 35 21 25 3 65 12 25	37E SC 42E ST 37E ST 43E ST 43	000
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1902P • 18E1P	Willow Creek Arbuckle Mountain Anthony Lake	33 45 18 75	29E 5400 37E 7125	21E6 * 22E7 * 22E9 * 21E4 * 21E5 * 21E3	Hogg Pass Jump-Off-Joe Little Meadows Marion Forts Santiam Junction Whitemater Bridge	24 135 75 1 145 56 17 115 56 29 115 71 14 135 76 20 105 76	£ 4755 3400 £ 4000 . 2600	2166a 20614a 22612 * 21649 22646 22616 *	Ocq Hollow Finley Cornals Fourmile Lake Gerber Howard Prainte Hyatt Prainte	3	9 369 9 369 2 398 12 389	16E 5E 13E 4E	4850 4500
	UPPER JOHN DAY WATER				McKenzie River		. 41/3	ninc c	Onel. Disklanders		P 214	1.3	4900 6550 5320
1902P * 18E16P * 18E13 20E4 19E3P *	Upper John Doy R Arbuckle Hountain Blue Mountain Springs Blue Mountain Summit Butte Creek Summit Oerr	33 45 21 155 6 125 5 85	35E 5900 36E 5098 22E 3930	21E8 22E4 21E7* 21E9	Gead Horse Grado Lost Creek Ranch McKenzle White Branch Slide		1 3700 E 1956 & 4800 E 2700	22G33 * 20H1a 20G9P * 20G2AP * 20G134 21G3P *	Quartz Mountain Seven Mile State Line Strawberry Summer Rim Sycan Flat laylor Butte	(Cal)	10 33: 21 48: 4 40: 23 13: 25 31: 21 33:	S 110 S 160 S 166 S 166 S 146 S 141	5725 5750 5760 7100 5500 5100
18E8 ° 19E9P 1806P °	Gald Center Izee Summit	21 95 28 165	36E \$340 29E \$293	22FJ=	Middle Fork Willomette Cascade Sumatt		Aizvo						
50E5 .	Marks Creek Ochoco Meadows	28 35 25 125 21 135	19E 4540 20E 5200	22F6 22FS*	Actredle Springs Railroad Overpass	36 215 4E 21 225 5E	2120 2750	Pacific	Power and Light Co	mpany	`r \$n	ow 5	lollanı
19E7 • 18E9P •	Oerr Gald Center Lizee Summit Lucky Strike Marks Creek Ochoco Headows Snow Mountain Starr Ridge Tipton	1 195 20 155 34 105	26E 6220 31E 5150 354E 5100	22F40 22F4• 22F14•	Lassace Summit McCredie Springs Railroad Overpass Roaring River Salt Creek Falls Summit Lake	29 195 6E 32 225 5h 33 245 5h	£ 5600	4 5 8	Crystal (PPAL) Fort Klamath (PPAL) Harriman Lodge (PPAL))	26 34 22 33 3 36	S 68	4200 4150 4200
(JPPER DESCHUTES, CROOKEE	WATERSHED)\$ (8)		Coast Fark Williamotte	River							
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21E22 21F8 22F3 *	Bald Peter Caldwell Ranch Cascade Summla	29 10S 30 21S 7 23S	9E 5400 8E 4400 6F 4880	22F42* 22F13	Champion Golden Curry Creek Holland Mendows Layme Creek R.S. Lund Park Menwer Creek	16 225 2E 31 215 1E	4900 1200		Gaara In	L.			
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21F6* 21E2Sa	Irlsh-Taylor Llonshead	29 185 25 205 1 105	6E 5500 8E \$400		Maiy'i Kivei			20112a 20113a	Cox Hat Crowder Hat (Olsmal !wwwp ((Cal)	16 37 30 47 31 48	'S 10E 'N 116 IN 166	5750 5200 7200
21F10 * 21E16 21E23	New Crescent Lake New Outchman Flat #2 Raning Creek	245 21 182 281 15	6E 4800 9E 6400 9F 4800	23E1	Mary's Peak	21 125 7H	10.00	20G17a 20G6 P * 20G19a	Patton Mendow Quartz Hountaln Roomer Headow	2	2 36 2 36 21 30	5 100 5 166	6320 6320
22F14* 21F3	Summit Lake Tangent	33 245 28 185	5',E \$600 10E \$400		Tuntotis River			50031. a	Bear Flat Pendow Camus Crock Cox Flat Crowifer Flat Olsmal 'watep Patton Mendow Quertz Mountain Ronger Headow State Line Strawherry	(Cal)	4 40	IN 111 05 161	5760 5760
21E15 21E13* 21E24a	Bald Peter Caldwell Ranch Cascade Summit Chemult Alt. Hogg Pass Mungry Flat Irish-Taylor Llonshead New Crescent Lake New Outchman Flat #2 Racing Creek Summit Lake Fangent Three Creeks Meadows khitewater Neadow	34 16\$ 17 10\$	9E 5650 9E 4160	2302° 2301°	Soine Creek Saddle Mountain	34 IN 5H 25 IN 6H	200 0 3250		Abeit La	k o			
	Crooked River				ROGUE, UMPQUA WATER	SMINS II		20615# 20618ap	Boar Flat Membow Colvin Creek Cov Flat Finley Corrals Quartz Mountain Snerwin Yalley	1	27 30 12 30	5 19 5 21	L 5900 L 550
19E3P • 20E1P			23E 5670		Rogue River		- }	20G11A 20G14n 20G611*	Finley Corrals Quartz Mountain	1	11 36	/5 18 5 16 5 16	£ 6000 £ 5320
20E2 • 19F1 •	Oerr Marks Creek Ochoco Meadows Snow Hountaln Tamarack	21 13S . 1 19S .	20E 5200 26E 6220	2364P 2266 22628	Althouse Annie Spring	17 415 76 19 315 66	4530 6018	20610a	Snerman Valley	I	5 37	G 211	0000
19E4	lamarack	8 155	2SE 4800	23G1S 22G21P *	Althouse Annie Spring Beaver Dam Creek Blgelow Camp Big Red Mountain Billie Creek Divide Caliban Ocadwood Junction Okamond-Crater Summit Fish Lais	19 405 5H 31 405 1H	5120 1 6250	20G2A1: *	Summer Li Summer RIm		21 H	S 16	7100
HOOD,	MILE CREEKS, LOWER DESC		RSHEDS 61	22G13P * 22G30 22G27	Billie Creek Bivide Caliban Geadwood Junction	30 365 5E 16 405 1E 8 385 4E	5300 6500 4600	277011	Silver Lo				
2106P 21D1 *	Basalia Handaya	2 25	10E 4300 9E 3200	22F19 22G14P * 22G12 *	Okamond-Crater Summit Fish Lake	3 275 6L 3 375 4E	5800 4665 6000	21120° 20013a	511ver Cruek Sycan Flat	25 A	26 21 25 3	75 13 15 14	1 4900 £ 6500
2198° 2104°	Brooks readows Greenpoint Reservoir Ht. Nood Test Site Red Hill Switchback	7 3S 20 1S	9E 5400 9E 4400	2363 ° 22626	Fish Lake Foundle Lake Grayback Peak Howard Prairie	9 405 5% 32 385 4E	6000 4500		Marana	-1			
21028 2107P	1111v Jane	15 25	9E 3258 9E 6000	22616 * 22631 23614	Mt. Ashland Switchback	15 395 3E	6400	20G8P 20/13a	Barloy Camp Camas Creek Olsmal Swamp (C Hart Mountain Shermin Vallny	(al)	5 31 31 4	15 22 35 21 34 16	E 5720 E 7200
	Jana Canala Marata			23GS 22GS	Park Headquarters	8 315 68	6550	1961a 20610a	Hart Mountain Shermon Valley		1 3/ 15 J	55 25 75 21	€ 5600
2106P	Brooks Headous		IOE 4300	22G2 22G20 22G32	Slakiyou Sumalt Skil Bowl Road	17 405 2E 22 405 1E	4630 6000		Guano L	ake			
				2269	South Fork Canal	12 J35 JE	3500	1981 1961a	Bald Mountain (F Hart Mountain		1 30	55 25	St 6350
	Lawer Deschutes R	liver			Umpqua Rivei			1910/a	LECTIO GOLLY ME. (F	VATERS)	ILD II	ı	1 6600
21012 *	Clear Lake Clear Lake Experimental	29 45 29 45	9E 3500 9E 3500	2 2F9	Champlon	12 235 16		18F 7 o	Silvies River -				E 5340
	LOWER COLUMBIA WATE	DEMENS III		22F18P * 23G8 23G9 *	Otamond Lake King Mountain No. 1 King Mountain No. 2	29 275 6E 5 335 4H 4 335 4H	4500	19F2 19F3	Call Mendows Onlintment Lake Emlgrant Butte		28 15 14 21	95 26 15 27	1 5600 E 5000
	Bull Run River	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		23G10 23G11	King Mountain No. 3 King Mountain No. 4 King Mountain No. 5 29	33 325 4W	1 3648	18F3P 19E9P 18F1*	Idlewild Camp Tree Swimit Rock Spring	;	29 10 23 10	55 29 95 32	£ 5200 L 5293 E 5100
21033*	Stazed Alder	5 25	8E 3650	23612 23613 22F16	King Mountain No. 6 North Umpqua	20 325 4W 19 265 6E	4215	19F1* 19E7* 18F4P	Snow Mountain Starr Ridge		1 P 20 P	95 26 55 31	E 6220 E 5160 E 4800
21035 *	Sondy River Nud R1dge	1 45	81,2 3800	22F23 22F24 22F25	Red Butte No. 1 Red Butte No. 2 Red Butte No. 3	36 275 2H 30 275 1H 30 275 1H	4000	10141	Stinking Water				E 4000
21034 ° 21084	North Fork Reservoir Mt Nood Test 51 te		6E 3120 UF 5400	22F26 22F27	Red Butte No. 4 Red Butte No. 5	30 275 1H 20 275 1H	3000 2500	18F6a	Donner Und 81. Buck Patture				E 5300
	WILLAMETTE WATERS	HEDS IN		22F28 22F17	Red Butte No. 6 Trap Creek	17 275 18 1 275 46		1862PA * 1961a	Fish Creek Bart Boostain		4 3	35 33 65 29	BE 7900 51 6350
210124	Clackamas Rive		81.E 3400		KLAMATH WATERSHEE	55 1		18G1PA * 18G7a	511vies "V" Lake "Lout and White		31 3	555 38	3E 6900 24E 6900
21013° 21012° 21022	Clear Lake Clear Lake Exp.	29 45 29 45	9E 3500 9E 3800		Klemoth River			18669a	Pueblo Summit		14 40	0.5 34	4E 6800
21014P* 21017	Peavine Ridge 14 Timothy Lake	8 15 6S 26 SS	7E 3500 8E 3295	22G6 22G13P * 21F22 *	Annle Spring Billie Creel Olvide Chemult Alt,	19 315 68 30 365 58 21 275 88	5 300 4760	18HI 17G5a 18G5a	Oisaster Paak (i Oregon Canyon Trout Creek		8 4	05 40	4E 6500 0E 6950 8E 7800
	Sontiam Rive	r		22G24* 20G12a 20H2a	Cold Springs Camp Crazyman Flat	12 355 58 9 345 158 1 30 478 118	6100		Hainey L			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 000
2268 *	Oaly Lake	15 125	6E 3600	22F19	Olamond-Crater Surmit	3 295 68	5800	18/8a	Buckshin Lake		25 2	95 30	OE 5200
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The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE

Idaho Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon State University
Oregon Department of Water Resources
Soil and Water Conservation Districts of Oregon
COUNTY

Douglas County Water Resources Survey FEDERAL

Department of Agriculture
Cooperative Extension Service
Forest Service
Soil Conservation Service
Department of Army
Corps of Engineers
Department of Commerce

NOAA, National Weather Service

Department of Energy

Bonneville Power Administration

Department of the Interior
Eureau of Land Management
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The Crag Rats, Hood River, Oregon

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